<u>CLAIMS</u>

I claim:

5

10

15

A method for utilizing an object that is dependent on object data comprising:

- (a) storing the object data for the object separate from a file containing an instance of the object;
 - (b) obtaining a request to load the file;
 - (c) determining if the object data is available; and
 - (d) if the object data is available:
 - (1) Obtaining the object data; and
 - (2) utilizing the object data to display a graphical representation of the object.
- 2. The method of claim 1 further comprising displaying an empty graphical representation if the object data is not available.
 - 3. The method of claim 1 further comprising storing a universally unique identifier (UUID) with the file to match the object and the object data.
- 20 4. The method of claim 1 further comprising storing a reference to the object data in the file.

- 5. The method of claim 4 wherein the reference is a uniform resource locator (URL).
- 6. The method of claim 1 wherein the object data is stored on a secure server and wherein the determining if the object data is available further comprises determining if the request to load the file provides proper access permissions for the object data.
- 7. The method of claim 6 wherein the request to load the file originates

 10 from outside of a network where the object data is stored and the object data is not
 available because a network security mechanism determines that the request does not
 provide the proper access permissions.
- 8. The method of claim 1 wherein the separate location is on a supplier's network and a supplier maintains and updates the object data.
 - 9. The method of claim 1 wherein the utilizing the object data occurs in real time across a network.
- 20 10. The method of claim 1 wherein: the file is a drawing; the object is a drawing component; and

5

10

15

the object data provides the graphical representation of the drawing component.

- M. A computer implemented system for utilizing an object that is dependent on object data comprising:
 - (a) an object dependent on object data;
 - (b) a file containing an instance of the object;
 - (c) means for storing the object data in a separate location from the file;
 - (d) means for obtaining a request to load the file;
- (e) means for determining if the object data is available, and if the object data is available:
 - (1) means for obtaining the object data; and
 - (2) means for utilizing the object data to display a graphical representation of the object.
- 12. The system of claim 11 further comprising means for displaying an empty graphical representation if the object data is not available.
- 13. The system of claim 11 further comprising a universally unique identifier (UUID) that may be utilized to match the object and the object data.
 - 14. The system of claim 11 wherein the file further comprises a reference

from the object to the object data.

15. The system of claim 14 wherein the reference is a uniform resource locator (URL).

5

16. The system of claim 11 further comprising:

a secure server where the object data is stored; and

wherein the means for determining if the object data is available further comprises means for determining if the request to load the file provides proper access permissions for the object data.

10

17. The system of claim\16 wherein the request to load the file originates from a network other than a network that hosts the secure server where the object data is stored and the object data is not available because a network security mechanism determines that the request does not provide the proper access permissions.

15

18. The system of claim 11 wherein the separate location is on a supplier's network and further comprising means for a supplier to maintain and update the object data.

20

19. The system of claim 11 wherein the means for utilizing the object data occurs in real time across a network.

20. The system of claim 11 wherein:
the file is a drawing;
the object is a drawing component; and
the object data provides the graphical representation of the drawing

10

15

5

component.

- An article of manufacture embodying logic for performing a method for utilizing an object that is dependent on object data, the method comprising:
- (a) storing the object data for the object separate from a file containing an instance of the object;
- (b) obtaining a request to load the file;
 - (c) determining if the object data is available; and
 - (d) if the object data is available:
 - (1) obtaining the object data; and
- (2) utilizing the object data to display a graphical representation of the object.
 - 22. The article of manufacture of claim 21, the method further comprising

5

10

15

20

displaying an empty graphical representation if the object data is not available.

- 23. The article of manufacture of claim 21, the method further comprising storing a universally unique identifier (UUID) with the file to match the object and the object data.
- 24. The article of manufacture of claim 21, the method further comprising storing a reference to the object data in the file.
- 25. The article of manufacture of claim 24 wherein the reference is a uniform resource locator (URL).
- 26. The article of manufacture of claim 21 wherein the object data is stored on a secure server and wherein the determining if the object data is available further comprises determining if the request to load the file provides proper access permissions for the object data.
- 27. The article of manufacture of claim 26 wherein the request to load the file originates from outside of a network where the object data is stored and the object data is not available because a network security mechanism determines that the request does not provide the proper access permissions.

10

- 28. The article of manufacture of claim 21 wherein the separate location is on a supplier's network and a supplier maintains and updates the object data.
- 29. The article of manufacture of claim 21 wherein the utilizing the object data occurs in real time across a network.
 - 30. The article of manufacture of claim 21 wherein:

the file is a drawing;

the object is a drawing component; and

the object data provides the graphical representation of the drawing

component.

RAZ